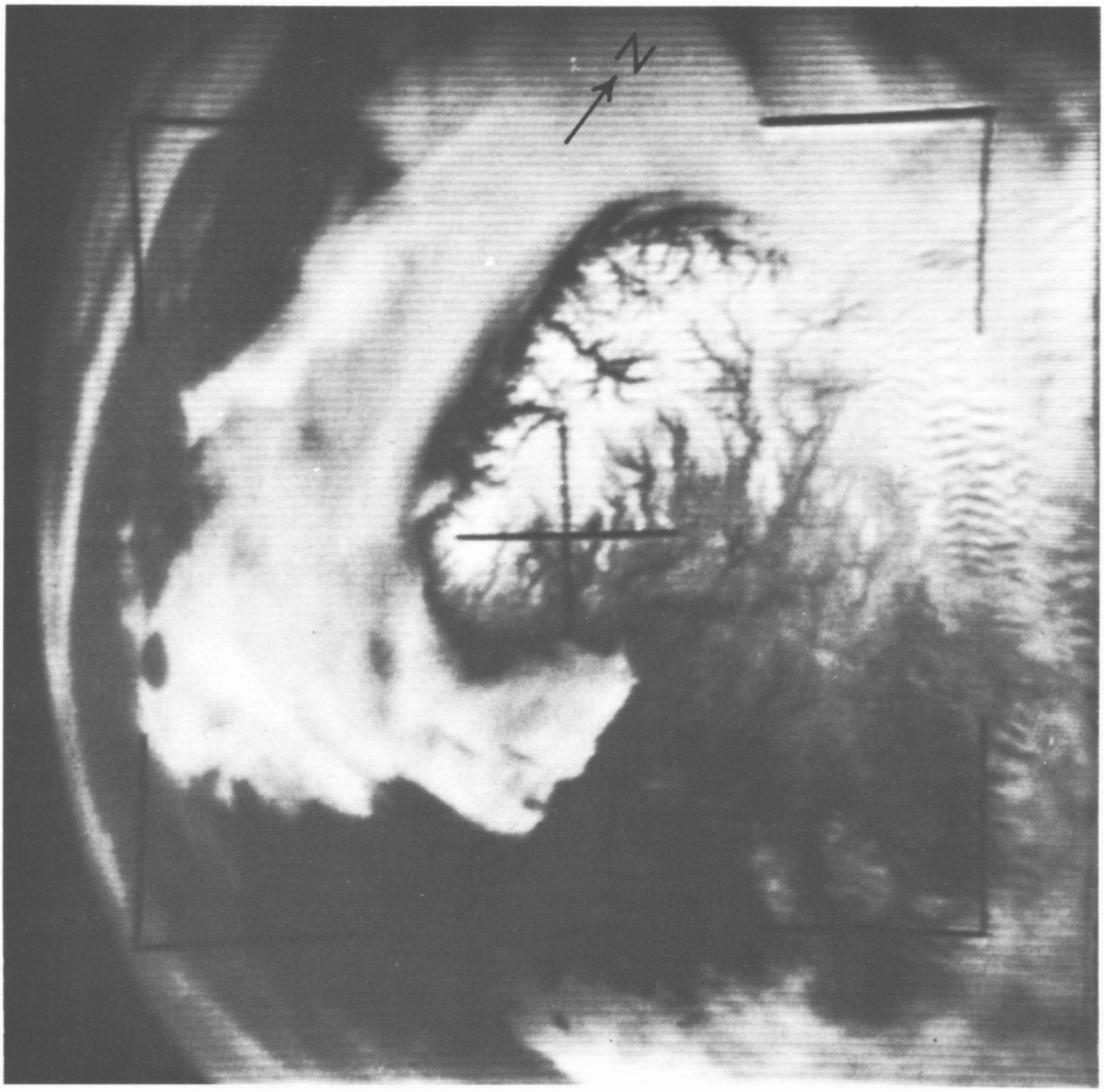
PICTURE OF THE MONTH



TIROS IX, Pass 835/834, Camera 2, Frame 4, 1028 GMT, April 1, 1965.

Snow-covered terrain, foggy ocean, and mountain-wave clouds are distinctly separated and clearly visible in this TIROS IX photograph, which is centered over southern Norway. The satellite altitude at picture time was approximately 795 km., not far from perigee. North is indicated by the arrow. The photograph was taken on April 1, 1965—the 5th anniversary of the launch of TIROS I.

The surface synoptic analysis for 1200 GMT, April 1, showed a moderately large anticyclone (1034 mb.) centered over the North Sea, accompanied by generally light winds. Fog and low stratus cover nearly all of the North Sea but very little of the adjacent land areas. The stratus extends northward into the Norwegian Sea and westward and southwestward to the British Isles. At the left of the picture, toward the horizon, a portion of the east coast of Britain is delineated rather well by the fog.

The snow-covered mountains and dark fjords of southern Norway are plainly visible, under clear or nearly clear skies. It is believed that low-level air drainage from the elevated interior kept the sea fog and stratus away from the immediate vicinity of the Norwegian coast.

At 500 mb., the anticyclone was displaced southwestward to the English Channel, with a strong northwesterly flow across the major mountain ranges of Scandinavia. Lee-wave clouds, located over central Sweden, are visible toward the right of the photograph. These clouds probably are at middle-tropospheric levels; the wavelength averages approximately 14 km.

The whitish area at bottom center of the photograph is specular reflection from the surface of the southern Baltic Sea. Little or no cloudiness exists over that region.